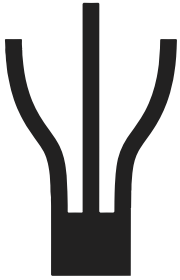
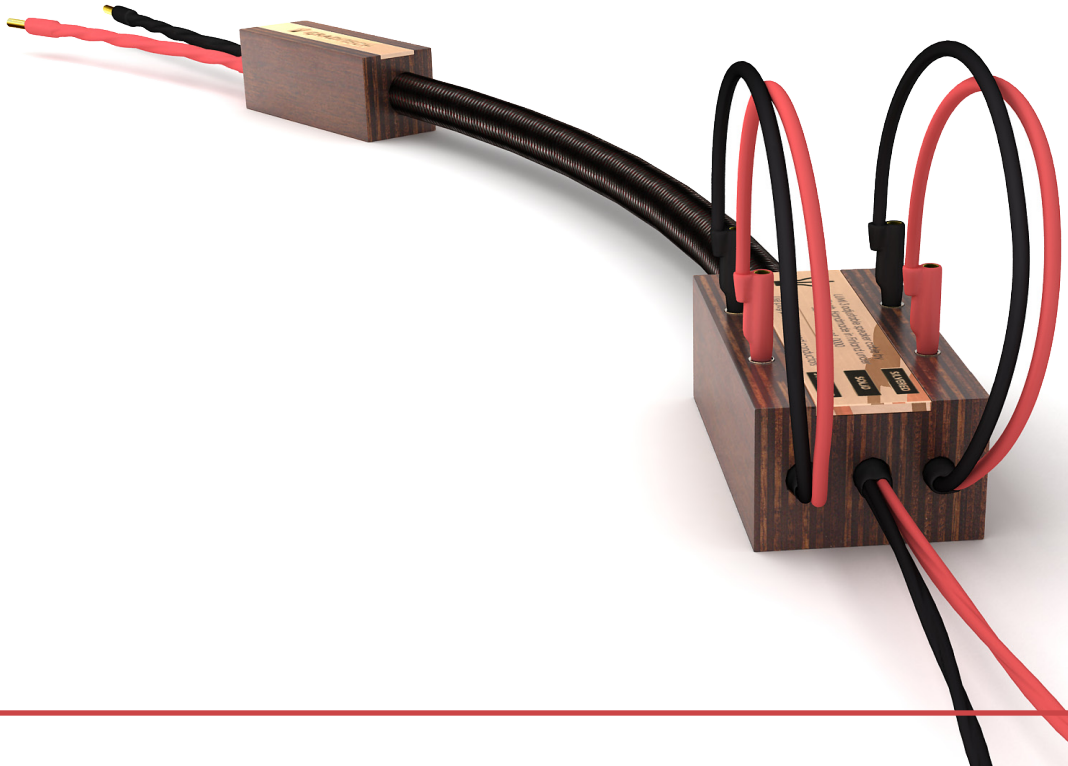


GRADITECH

LUMI SERIES USER MANUAL



Graditech

Welcome to Graditech!

We thank you for purchasing LUMI speaker wires. We went to great lengths to develop a speaker wire that will offer you superior performance and years of musical pleasure.

Snow in Finland is light and soft. It quietly drifts to earth days on end engulfing everything. Each flake has its own shape, uniquely reflecting light. It is nature's art. And when it snows for days, there is a silence that cannot be described. It is a silence that simply hugs you. You become one with nature and can feel and sense the Lumi.

Amplifiers and speakers behave differently with different cables. To solve this problem we have developed an adjustable speaker cable that always matches your system allowing it to sound its best with Graditech wires that exhibit "Lumi quietness."

Graditech's Adjustable Loudspeaker Cable™ technology has been created for your listening enjoyment. By using two or three different matched conductors — single-threaded copper, stranded copper and/or Teflon-insulated silver plated copper — the ALC™ concept is simple: select the combination of conductors that connect with your system allowing the music to flow. You will always get clean sound and hear each note and harmonic. It does not matter what equipment you use or what kind of space you have, the cable will always generate the best synergies. Graditech's Lumi Series will always allow your system to sound its best. System dependency is a thing of the past and the search for the perfect cable has come to an end!

We are sure you will agree that Graditech will unlock the door to pure music. Tune for your system and room and listen. Tonal quality, pace, harmonics, soundstage, music. It is all there. Enjoy listening!

Unpacking

The wires have been carefully packed and inspected at the factory. After unpacking your Lumi speaker wires, please inspect them for any shipping damage. If any damage is found, contact your dealer or Graditech immediately.

Please keep all original packaging for the entire warrantee period. If you require replacement packaging please contact Graditech or your dealer.

About LUMI Speaker Wire

There are three models of Lumi speaker wires. Lumi 2 and 3 are adjustable. Lumi 1 is simply plug and play. However, all Lumi speaker wires require burn in to optimize their sound. We recommend that you play the wires using all the conductors for about 100 hours before you begin to tune for your system.

Lumi 3

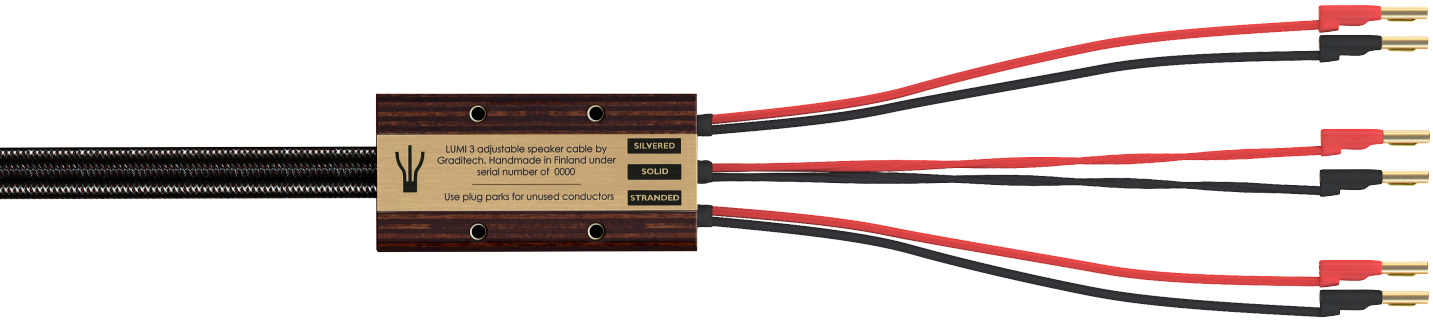
“One wire for any system with the ability to tune for system and room… sound, tonal quality, soundstage. System dependency is eliminated and every note comes through.” LUMI 3 adjustable cable is a new way to approach your system and music, getting the best sound with just one cable. Featuring Graditech’s proprietary ALC™ technology to create perfect sound for each and every system, Lumi 3 consists three different conductors: silver-copper, stranded copper and solid copper, creating a wide variety of ways to achieve clear, natural sound regardless of amplifier or speakers. The LUMI Cable Park™ isolates those wires not being used.

Lumi 2

We gave careful consideration to Lumi 2. We listened to Lumi 1 and then to 3 and then to 1. What was in between? Was there something in between? Did Lumi 2 have to be in between? We could not leave well enough alone. Lumi 2 consists of two pair of two different conductors – single-threaded and stranded – with ALC™. While Lumi 2 does not have the same potential configurations as Lumi 3, its geometry maintains the sonic signature and integrity of Lumi 3. And, Lumi 2 takes Lumi 1 to a new musical level.

Lumi 1

Lumi 1 was an interesting challenge. In experimenting with different configurations and types conductors – stranded and single-threaded – the sharpness and speed of the transients were immediately apparent, yet deceiving. We continued to work on the geometry and conductors until we had the balance we wanted. Lumi 1 lets you hear the speed and micro-dynamics of the music. Being our entry speaker wire we chose not to include ALC™ and believe that the results of our efforts proved this decision correct. You can hear the mouth voice of the singer and the surrounding air. We are very happy with this wire. We hope you will be too.


LUMI 3 adjustable speaker cable by Graditech, Handmade in Finland under serial number of 0000
Use plug parks for unused conductors
SILVERED
SOLID
STRANDED

How To Connect and Tune Your Lumi Speaker Cables

IMPORTANT. Turn off your amplifier when connecting, disconnecting, and changing leads on your Lumi speaker wires. Never let the positive and negative connectors touch each other, even when your amplifier has just been turned off. The power capacitors in your amplifiers still carry current.

Lumi 2 and 3 have dozens of different configurations. By listening to each conductor independently and then in parallel with another on both the positive and negative poles, you will not only learn the full range of sound that your system can produce, but most important, you will unlock your system's door to pure music.

With your amplifier turned off, connect the Lumi speaker wires to your amplifier. The Cable Park™ end of the wires attach to your speakers and the end with just a positive (red) and negative (black) leads attach to your amplifier. Most amplifiers will accommodate banana plugs. We recommend that you insert the banana plugs into the ends of the binding posts versus compressing them in the center holes of the post. Graditech will not warrantee crushed banana plugs.

To burn in you wires, use all the conductors. All Lumi speaker wires require some playing time before you will hear their optimum performance.

To listen to and burn in your Lumi speaker cables, simply connect all the positive leads (red) together by inserting each banana plug into the back of the other. Do the same for the negative leads (black). Then connect the positive lead to the positive input of your speaker and the negative lead to the negative input of your speaker. Next connect the positive lead to the positive output of your amplifier and then connect the negative lead to the negative output of your amplifier. Repeat the same process for the other speaker.

Be sure to only connect positive to positive (red to red) and negative to negative (black to black). Never connect a positive and negative wire as it may cause damage to your amplifier. Graditech is not responsible for any damage caused to any piece of equipment should you cross positive and negative leads.

For Lumi 1 speaker cables, you simply have to connect the positive lead (red) to the positive input of the your speaker and the positive output of your amplifier. And, then connect the negative lead (black) to the negative input of your speaker and the negative output of the amplifier. Lumi 1 speaker wires are ready to play once they are connected correctly.

Once all the positive and negative leads are correctly connected to both the speakers and amplifier (red to red and black to black NEVER red to black or black to red) you are ready to listen to and burn in your Lumi speaker wires.

With Lumi 1 speaker cables, once you have completed this step the wires are ready to be listened to. No other adjustments are required.

Tuning Your Cables (only Lumi 2 and 3)

When you believe that your Lumi 2 or 3 speakers cables have been burned in, you are ready to tune the cables for your system. All adjustments are made at the speakers so there is no need to disconnect your Lumi speaker cables from your amplifier.

Turn off your power amplifier. Never try adjusting your Lumi cables with your amplifier turned on.

We recommend that you begin the tuning process by first listening to each connector individually. It is important to hear and learn the sound that each conductor produces in your system. Each conductor will interact with your amplifier and speakers differently. Taking notes of what you hear may be helpful.

With your amplifier turned off, disconnect the positive and negative leads from your speakers. Remember do not let positive and negative leads touch each other. Free the solid core conductor and insert the stranded and silver leads into an open space in the Cable Park. Do this for both the positive and negative leads and both right and left speakers. You should now have four leads inserted in the Cable Park and the solid core leads ready to be plugged into the speaker (See Figure 1). Insert the positive lead into the positive input of the speaker and the negative lead into the negative input of the speaker.

Figure 1: Solid core lead ready for playing

Make sure all connections are correct and there are no crossed leads (positive to negative or negative to positive). Turn on your amplifier and listen.

Once you are familiar with the sound that the solid core leads produce in your system, turn off your amplifiers, disconnect your speaker wires (remembering to not let positive and negative wires to touch each other) and prepare to listen to the stranded conductors. Unplug the stranded copper conductor from the Cable Park and insert the solid core conductor into the empty space. Do this for both positive and negative conductors and right and left speakers. You should still have four leads in the Cable Park but the stranded leads are now free and ready to be plugged into your speakers (See Figure 2). Connect the speaker wires to the speakers.

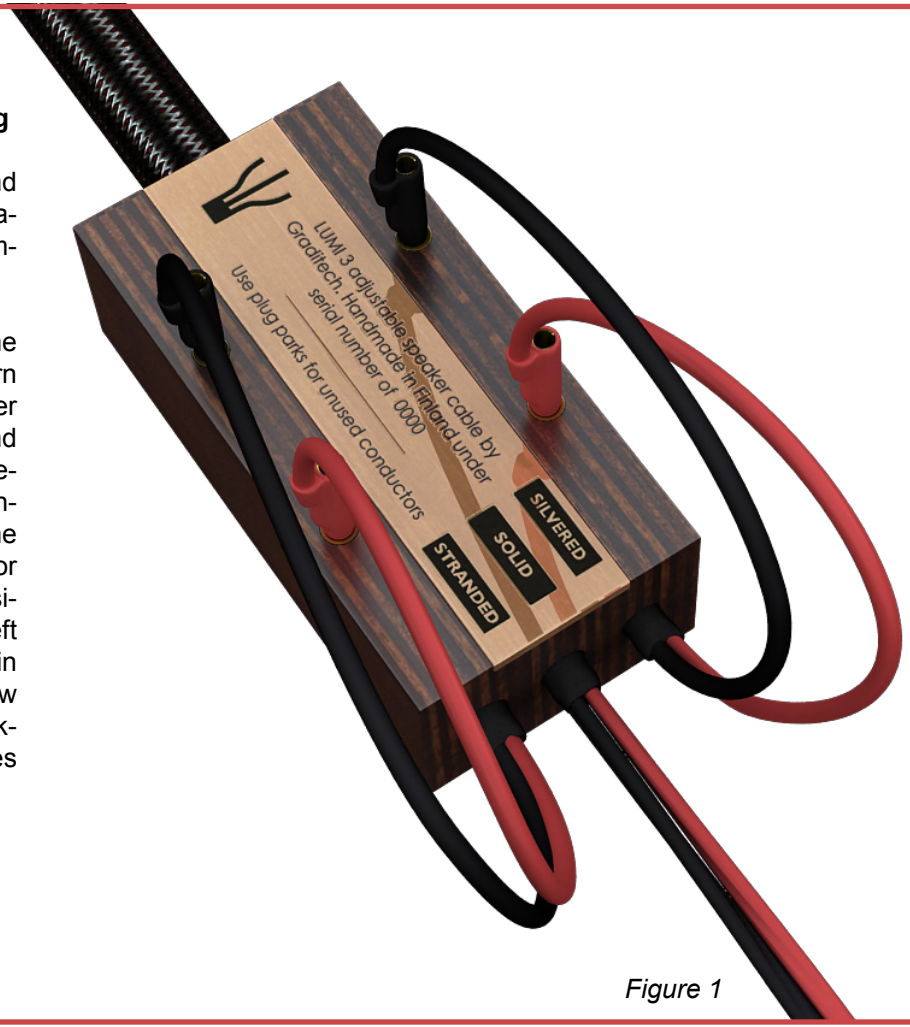


Figure 1

Figure 2: Stranded leads ready for playing

Make sure all connections are correct and there are no crossed leads (positive to negative or negative to positive). Turn on your amplifier and listen.

You will begin to hear the different sound the solid and stranded conductors produce. Take notes as to speed, pace, tonal balance, placement, etc. You are ready to listen to the silver coated conductors. You are also now familiar with how to change the conductors.

Turn off your amplifier, disconnect your speaker wires, remembering to not let positive and negative wires to touch each other, and prepare to listen to the stranded conductors. Unplug the silver coated conductor from the Cable Park and insert the stranded conductor into the empty space. Do this for both positive and negative conductors and right and left speakers. You should still have four leads in the Cable Park but the silver leads are free and ready to be plugged into your speakers (See Figure 3). Connect your speaker wire to the speakers.

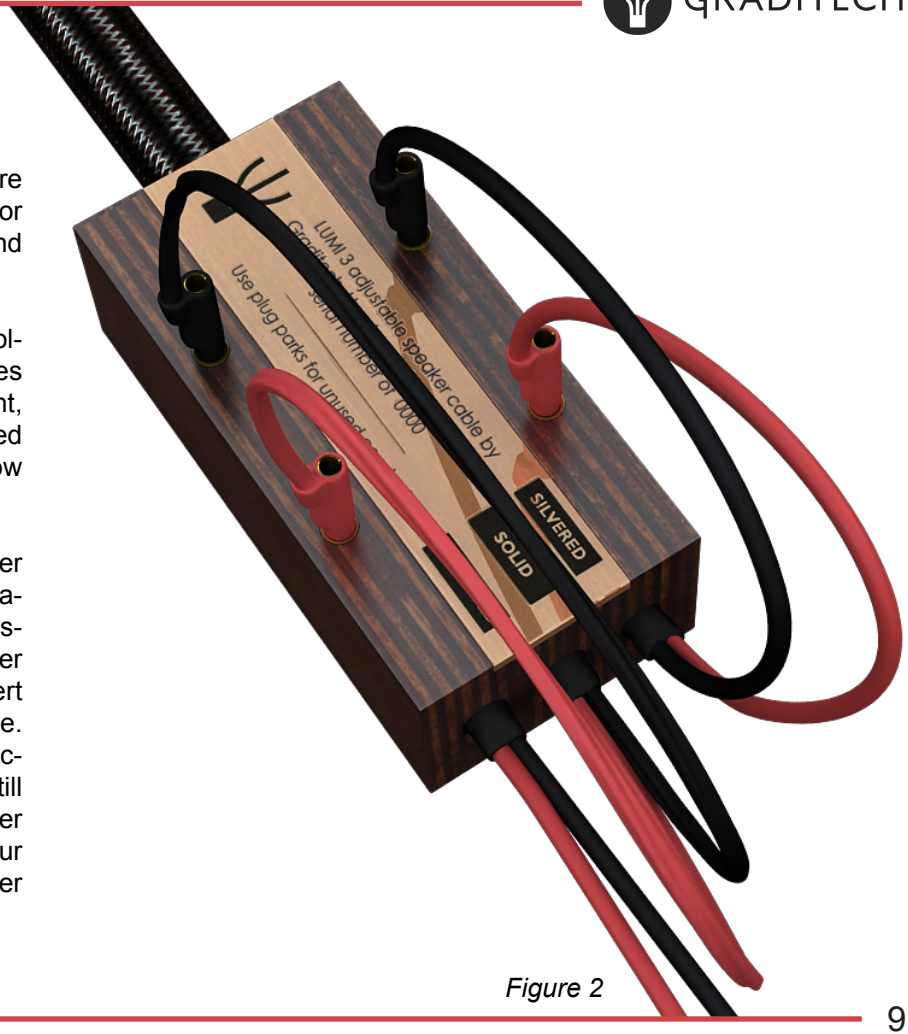


Figure 2

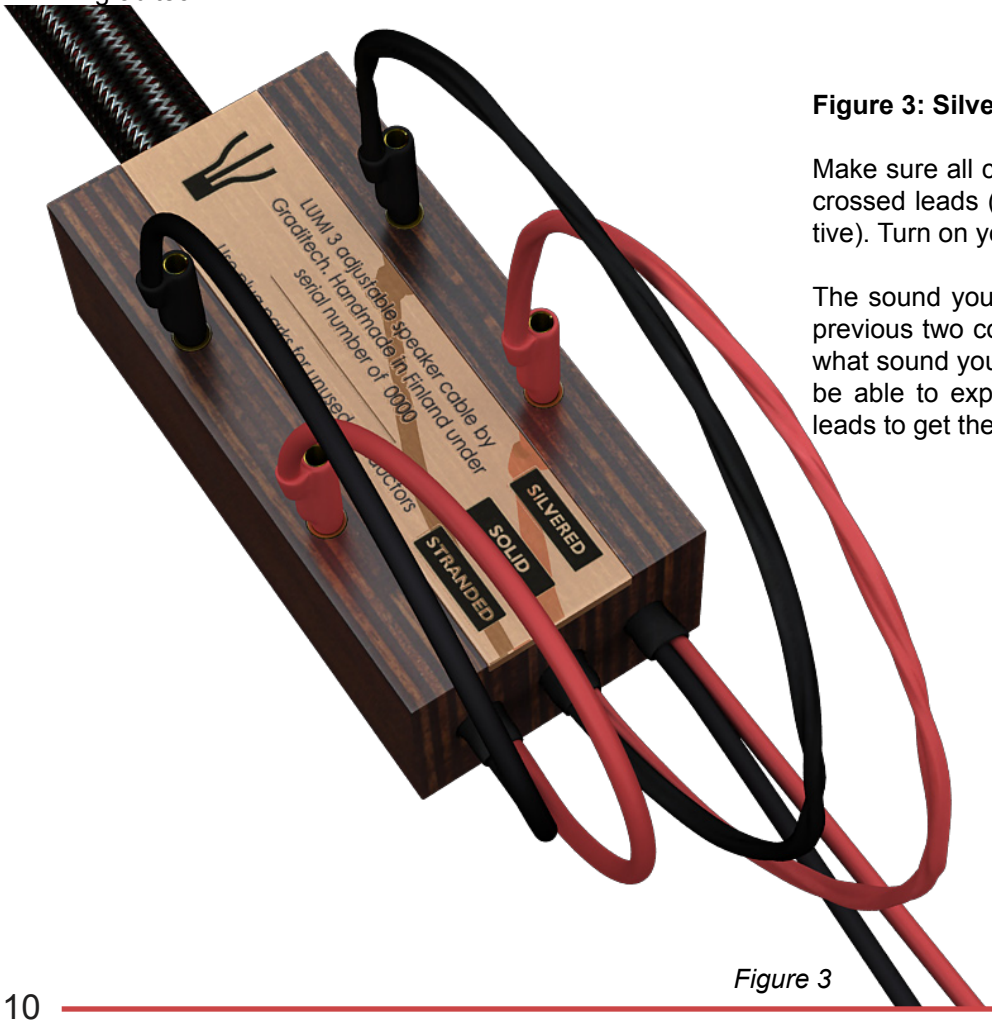


Figure 3

Figure 3: Silver coated leads ready for playing

Make sure all connections are correct and there are no crossed leads (positive to negative or negative to positive). Turn on your amplifier and listen.

The sound you now hear will still be different from the previous two conductors. You will be able to determine what sound you liked best from each conductor and will be able to experiment using different combinations of leads to get the best sound from your system.

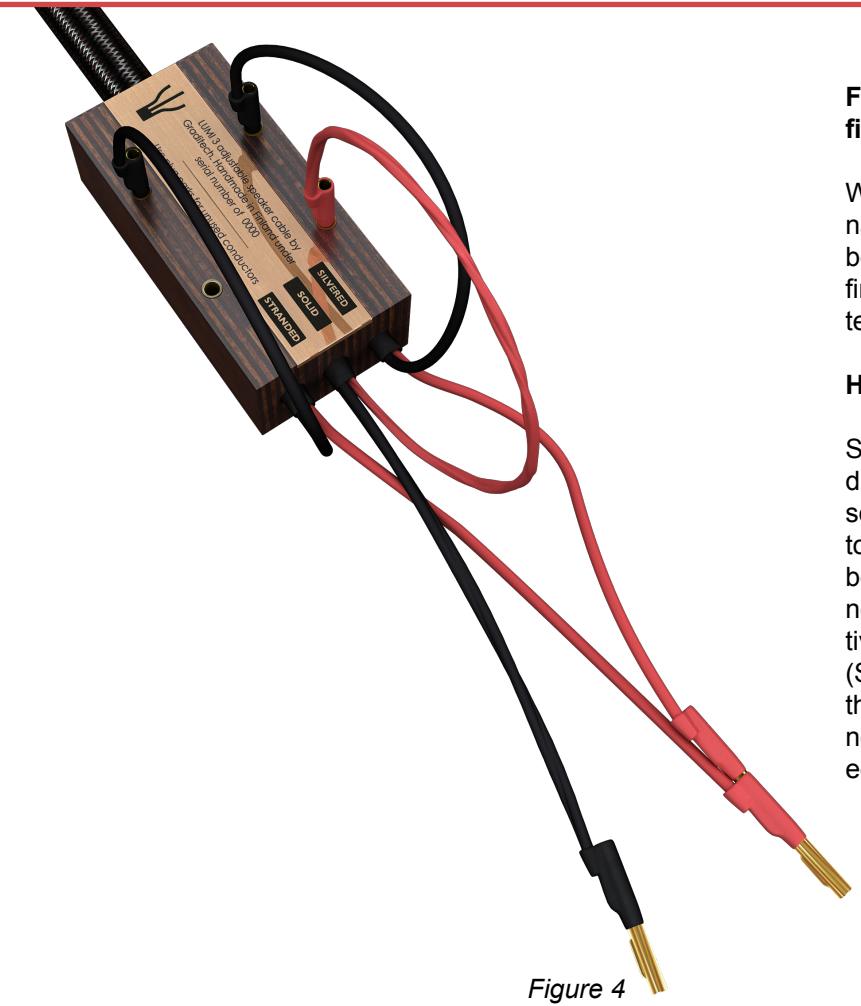


Figure 4

Figure 4: Example - Graditech factory system configuration

We encourage you to take time and try multiple combinations. If the cables are fully burned in and you have become familiar with the sound of each conductor, then finding the right combination of conductors for your system will follow quickly.

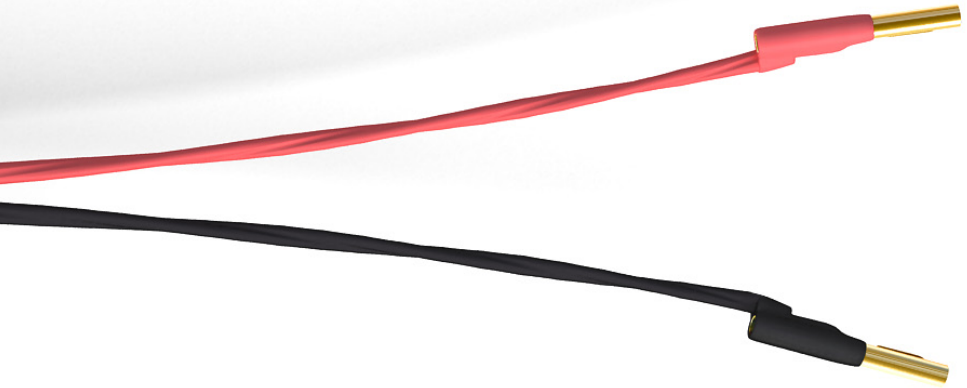
HINT

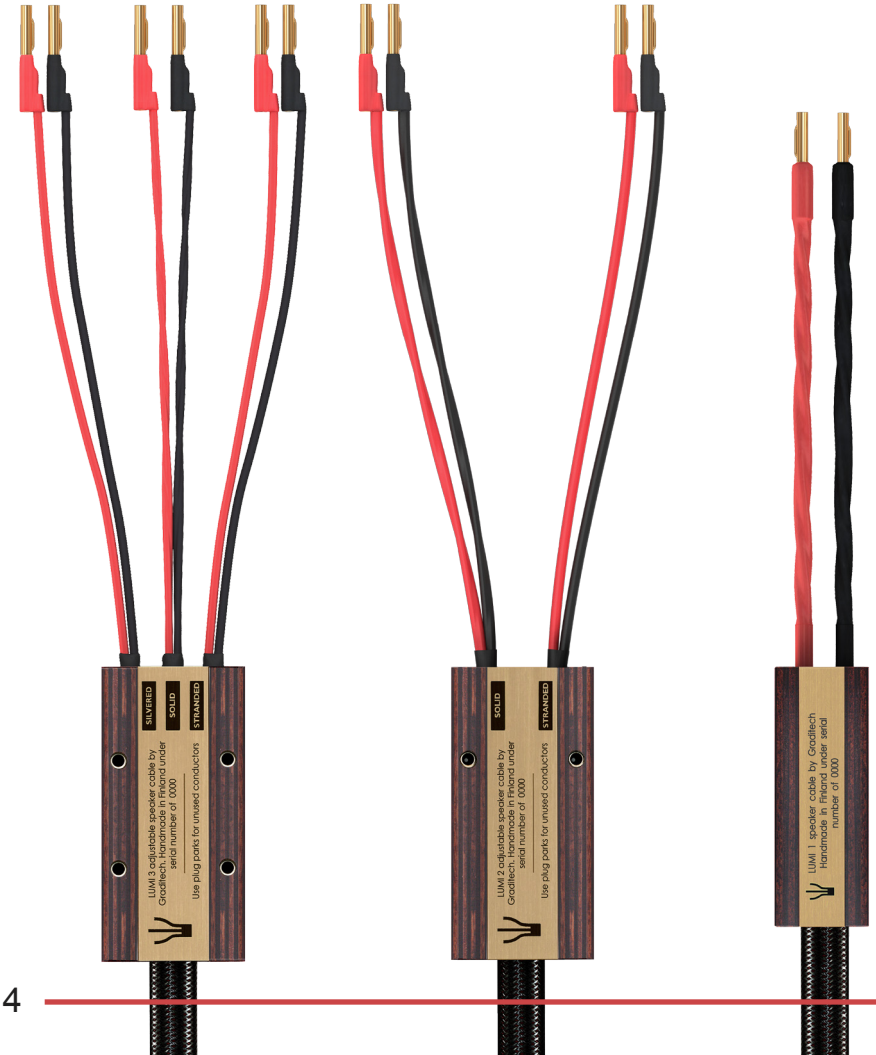
Some systems sound very good using all of the conductors, but it has been our experience that the best sound comes from using a limited number of conductors. In our factory, one of our reference systems gives best sound with the solid conductor being used for the negative pole and the stranded and silver for the positive. Hence, a total of three conductors are being used (See Figure 4). In another system we have found that the solid and stranded wires for both the positive and negative connections and no silver conductors sounded best.

LUMI 3 adjustable speaker cable by
Graditech. Handmade in Finland under
serial number of 0000
Use plug parks for unused conductors
SILVERED
SOLID
STRANDED

Lumi Specifications

All Lumi speaker wires share similar sonic characteristics. Careful consideration has been given to plugs, conductors, and dialectics. The geometry of the wires is similar but adapted for each series – Lumi 1, 2, and 3. Banana plugs are used for ease of tuning and docking.




SILVERED
SOLID
STRANDED
LUMI 3 adjustable speaker cable by Graditech. Handmade in Finland under serial number of 0000
Use plug parts for unused conductors
SOLID
STRANDED
LUMI 2 adjustable speaker cable by Graditech. Handmade in Finland under serial number of 0000
Use plug parts for unused conductors
LUMI 1 speaker cable by Graditech
Handmade in Finland under serial number of 0000

Lumi 3

An adjustable speaker cable comprised of three twisted pairs of different conductors to generate the best sound for your system. Two leads at the amp and six adjustable leads at the speaker.

Concept: Three different twisted pairs of wires of different composition and dielectrics designed to maximize the synergy between your speakers and amplifier.

- Silver plated copper with PTFE insulation, 1.22mm²
- Stranded copper with PVC insulation, 1.52mm²
- Solid copper with THEIC modified varnish, 1.10mm²
- Total wire area 3.84mm²
- Measurements 2.5m @1kHz
  - Capacitance 268pF
  - Inductance 0.81uH (Loop)
  - Resistance
    - Stranded copper 0.034ohm
    - Silvered copper 0.037ohm
    - Solid copper 0.040ohm
    - All parallel 0.013ohm

Lumi 2

An adjustable speaker cable comprised of two twisted pairs of different conductors to generate the best sound for your system. Two leads at the amp and four adjustable leads at the speaker.

Concept: Two different twisted pairs of wires of different composition and dielectrics designed to maximize the synergy between your speakers and amplifier.

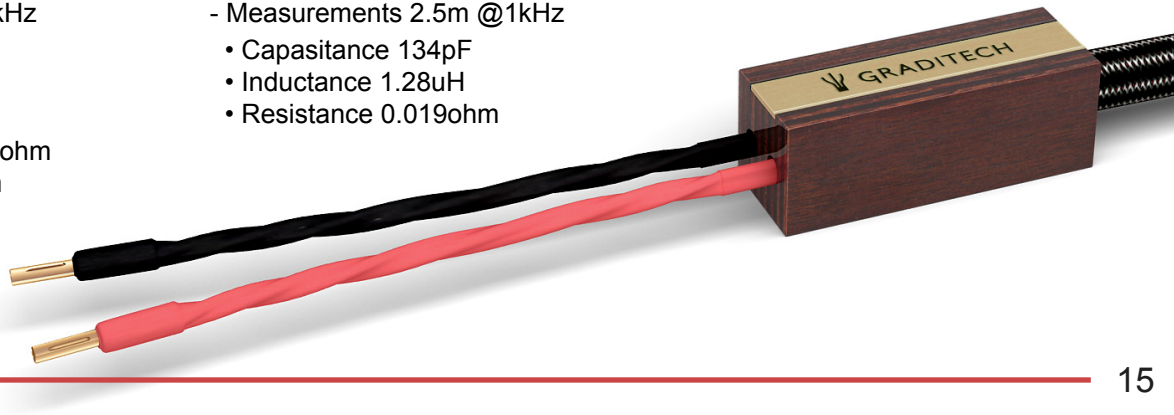
- Stranded copper with PVC insulation, 1.52mm²
- Solid copper with THEIC modified varnish, 1.10mm²
- Total wire area 2.62mm²
- Measurements 2.5m @1kHz
  - Capasitance 136pF
  - Inductance 1.29uH
  - Resistance
    - Stranded copper 0.034ohm
    - Solid copper 0.040ohm
    - All parallel 0.018ohm

Lumi 1

A non-adjustable speaker cable comprised of two twisted pairs of different conductors to generate the best sound for your system. Two leads at the amp and two leads at the speaker.

Concept: Two different twisted pairs of wires of different composition and dielectrics designed to maximize the synergy between your speakers and amplifier.

- Stranded copper with PVC insulation, 1.48mm²
- Solid copper with THEIC modified varnish, 1.08mm²
- Total wire area 2.56mm²
- Measurements 2.5m @1kHz
  - Capasitance 134pF
  - Inductance 1.28uH
  - Resistance 0.019ohm



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